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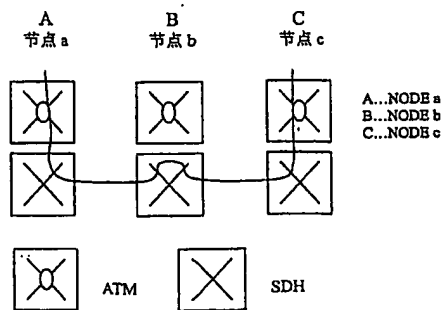
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- (71) 申请人(对除美国以外的所有指定国): 深圳市中兴通讯股份有限公司(ZTE CORPORATION) [CN/CN]; 中国广东省深圳市南山区高新技术产业园科技南路中兴通讯大厦, Guangdong 518057 (CN)。
- (72) 发明人;及
- (75) 发明人/申请人(仅对美国): 马焕南(MA, Huan nan) [CN/CN]; 李青(LI, Qing) [CN/CN]; 朱旻(ZHU, Min) [CN/CN]; 张佩华(ZHANG, Pei hua) [CN/CN]; 苏楠曦(SU, Nan xi) [CN/CN]; 中国广东省深圳市南山区高新技术产业园科技南路中兴通讯大厦, Guangdong 518057 (CN)。
- (74) 代理人: 北京同立伟业专利代理有限公司(BEIJING LEADER PATENT AGENCY CO.,LTD); 中国北京
- (81) 指定国(国家): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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(54) Title: A METHOD ABOUT PROTECTING HIGH LAYER SERVICE IN THE MULTILAYER COMMUNICATION EQUIPMENT

(54) 发明名称: 一种在多层通讯设备中保护高层业务的方法



(57) Abstract: This invention relates a method about protecting high layer service in the multilayer communication equipment, including low layer processing module provides transmission channels for high layer. Transparence VP link gateway is set up for up and down node by high layer processing module, in order to make the service content processed by the said module avoiding influence. After detecting the fault of the said processing module, high layer processing module message the low layer processing module, then the low layer processing module set up side road after detecting the fault of the high layer processing module, then separating the failed high layer process module. According to this invention, more network channels are not necessary, the protect of cluster network is not limited; the present invention aims to protect ATM service in the case of that ATM layer invalidate in the node of multiple service provision platform and multiple service transmit platform. The present invention solves the influencing of service from the other node to the said node in the case of device maintenance.

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(57) 摘要

本发明提出在多层通讯设备中保护高层业务的方法，包括：低层处理模块为高层处理模块提供低层传输通道；高层处理模块为从上游和下游节点通过本模块的业务建立透明的 VP 连接通路，使通过本模块处理后的业务内容不受影响；高层处理模块检测到本模块故障后通知低层处理模块；低层处理模块检测到高层处理模块故障后建立旁通连接，将出现故障的高层处理模块隔离。采用本发明，不需要冗余的网络通道，对组网保护方式没有限制；本发明主要针对多业务提供平台和多业务传送节点中 ATM 层处理功能失效的情况下对 ATM 业务进行有效保护；本发明解决了在设备维护时对网络其它节点跨本节点业务影响的问题。

**Abstract:**

This invention relates to a method for protecting high layer service in the multi-layer communication equipment, include that low layer processing module which provides low layer transmission passages for high layer processing module, and high layer processing module which sets up transparent VP link passage from up and down node by the service of said module, in order to make the service processed by the said module avoid influence. Once detecting the fault of the said processing module, high layer processing module will message the low layer processing module, and the low layer processing module will set up bypass connection after detecting the fault of the high layer processing module, then isolate the failed high layer process module. According to the present invention, extra network passages are not necessary, the means of protecting network is not limited. The present invention aims to protect effectively ATM traffic when the processing ability of ATM layer invalidate between MSPP and MSTP. The present invention solves the problem that will influence the other node of the network beyond the said node service in the case of device maintenance.